IN THE CLAIMS:

1. (Currently Amended) A magnetoresistive film comprising:

a soft magnetic free layer;

a ferromagnetic pinned layer; and

a non-magnetic layer interposed between the soft magnetic free layer and the ferromagnetic pinned layer such that the magnetization of said ferromagnetic pinned layer is fixed with respect to a magnetic field to be detected;

wherein the magnetoresistance of the magnetoresistive ~~firm~~ film changes upon application of a detecting current across said soft magnetic free layer and said ferromagnetic pinned layer through said non-magnetic layer, with the absolute value of the ratio of change in magnetoresistance of said magnetoresistive film having a peak greater than 20% ~~at a temperature in the range from 0°C to 60°C~~ and with a bias voltage applied across said ferromagnetic pinned layer and said soft magnetic free layer being in the range from +0.2 to +0.8 V and from -0.8 to -0.2 V.

2. (Previously Presented) A magnetoresistive film according to claim 1,

wherein said peak is maximal value.

3. (Currently Amended) A magnetoresistive film according to claim 1,

wherein said ferromagnetic pinned layer comprises ~~harf~~half-metal magnetic material.

4. (Currently Amended) A magnetic recording-reproducing head comprising:

a magnetic recording head having a ~~1st~~ first magnetic core, a ~~2nd~~ second magnetic core and coil; and

a magnetic reproducing head having a magnetoresistive film which comprises a soft magnetic free layer, a ferromagnetic pinned layer, a non-magnetic layer interposed between the soft magnetic free layer and the ferromagnetic pinned layer such that the

magnetization of said ferromagnetic pinned layer is fixed with respect to a magnetic field to be detected;

wherein the magnetoresistance of the magnetoresistive film changes upon application of a detecting current across said soft magnetic free layer and said ferromagnetic pinned layer through said non-magnetic layer, with the absolute value of the ratio of change in magnetoresistance of said magnetoresistive film having a peak greater than 20% ~~at a temperature in the range from 0°C to 60°C~~ and with a bias voltage applied across said ferromagnetic pinned layer and said soft magnetic free layer being in the range from +0.2 to +0.8 V and from -0.8 to -0.2 V.

5. (Previously Presented) A magnetic recording-reproducing head according to claim 4,

wherein said magnetoresistive film has a flux guide which is connected to a magnetoresistive film's opposite side to said recording medium.

6. (Previously Presented) A magnetic recording-reproducing head according to claim 6,

wherein said flux guide comprises a soft magnetic material so that the flux from the magnetic recording medium is introduced into the magnetoresistive film.

7. (Previously Presented) A magnetic recording-reproducing head according to claim 4,

wherein said peak is maximal value.

8. (Currently Amended) A magnetic recording-reproducing head according to claim 4,

wherein said ferromagnetic pinned layer comprises ~~harf~~half-metal magnetic material.

9. (Currently Amended) A magnetic sensor comprising:

a soft magnetic free layer;

a ferromagnetic pinned layer;

a non-magnetic layer interposed between the soft magnetic layer and the ferromagnetic layer such that the magnetization of said ferromagnetic layer is fixed with respect to a magnetic field to be detected;

a ferromagnetic layer; and

a non-magnetic insulating layer formed between said a ferromagnetic pinned layer and said ferromagnetic layer;

wherein the magnetoresistance of the magnetic sensor changes upon application of a detecting current across said soft magnetic free layer and said ferromagnetic pinned layer through said non-magnetic layer, with the absolute value of the ratio of change in magnetoresistance of said magnetoresistive film having a peak greater than 20% ~~at a temperature in the range from 0°C to 60°C~~ and with a bias voltage applied across said ferromagnetic pinned layer and said soft magnetic free layer being in the range from +0.2 to +0.8 V and from -0.8 to -0.2 V.

10. (Currently Amended) A magnetic sensor according to claim 9,

wherein ~~a~~ spin polarized tunnel electrons are injected into the soft magnetic free layer from the ferromagnetic layer.

11. (Previously Presented) A magnetic sensor according to claim 9,

wherein said magnetoresistive film has a flux guide which is connected to a magnetoresistive film's opposite side to said recording medium.

12 (Previously Presented) A magnetic sensor according to claim 11,

wherein said flux guide comprises a soft magnetic material so that the flux from the magnetic recording medium is introduced into the magnetoresistive film.

13. (Previously Presented) A magnetic sensor according to claim 9,

wherein said peak is maximal value.

14. (Currently Amended) A magnetic sensor according to claim 9,

wherein said ferromagnetic pinned layer comprises ~~harf~~half-metal magnetic material.

15. (New) A magnetic sensor according to claim 1 wherein said magnetoresistive film has a peak greater than 20% at a temperature in the range from 0°C to 60°C.

16. (New) A magnetic sensor according to claim 4 wherein said magnetoresistive film has a peak greater than 20% at a temperature in the range from 0°C to 60°C.

17. (New) A magnetic sensor according to claim 9 wherein said magnetoresistive film has a peak greater than 20% at a temperature in the range from 0°C to 60°C.